

MOOCs ENGAGEMENT OF PARTICIPANTS IN SWAYAM COURSE BASIC CONCEPTS IN EDUCATION

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Abstract

Study Webs of Active-learning for Young Aspiring Mind (Swayam) is a Massive Open Online Course (MOOC). In every course, there are learners who successfully pass and complete the course. However, there are also those who fail the course for various reasons. One such reason may be related to success in engagement. Although engagement differs with types of learners. In this paper, we analyse the participant's engagement in the course Basic Concepts in Education. The tool MOOCs Engagement Scale (MOOCsES) was constructed and validated by C.Vijila, and K.Thiyagu. (2022). The data was gathered from the google form through the Swayam course portal and limited to 528 participants. The analysis of the results reveals that the level of MOOCs engagement shows moderate and there are no significant differences among the participants with respect to gender, marital status, educational qualification, stream and age at a 0.05 % level. Further, the result shows that there is a significant difference among the participants with respect to rural and type of institutions at a 0.05% level.

Keywords: *Basic Concepts in Education, MOOCs Engagement, Swayam*

Introduction

Massive Open Online Courses (MOOCs) have marked a major shift in online education since their inception, not only by democratising access to information but also by enabling innovation in instructional methods and the creation of new infrastructures and pedagogical paradigms (E. E. Hernandez et al., 2015).

MOOCs are online courses taught via web platforms such as SWAYAM, edX, Udacity, Coursera, or ad hoc platforms that strive to provide a diverse range of pedagogical content to a diverse audience. In addition to free access, they emphasise lifelong learning (O. Borrás Gene et al., 2014), while certain institutions or interfaces may charge a fee for the issue of certifications. In this regard, they should be considered as a learning tool that enhances, amplifies, and leads its participants' cognitive processes (P. G. Altbach, 2014).

The terms engagement and motivation are sometimes used interchangeably. Both words, however, can be differentiated. Student involvement may be defined as the visible expression of motivation (Reeve, 2012), whereas motivation can be defined as the "why" or reason for a certain physical, emotional, or cognitive reaction (Darr, 2012).

Objectives

- To find out the level of MOOCs engagement of the participants in the Swayam Course Basic Concepts in Education.
- To find out the significant difference if any, in the scores of the MOOCs' engagement of the participants in the Swayam Course Basic Concepts in Education concerning background variables such as Gender, Age, Qualification, Type of institution, Stream and Residential area.

Hypotheses

- The level of MOOCs engagement of the participants in the Swayam course Basic Concepts in Education is high.
- There is no significant difference between the male and female scores in the MOOCs engagement of the participants in the Swayam course Basic Concepts in Education with respect to gender.
- There is no significant difference between the single and married participant's scores in the MOOCs engagement of the participants in the Swayam course Basic Concepts in Education with respect to marital status.
- There is no significant difference among 21-25 years, 26-30 years and 31 and above years participant's scores in the MOOCs engagement in the Swayam course Basic Concepts in Education with respect to age.
- There is no significant difference between the UG and PG participants in the MOOCs engagement of the participants in the Swayam course Basic Concepts in Education with respect to their Qualifications.
- There is no significant difference among the Government, Aided and Self-finance institution's participant's in the MOOCs' engagement in the Swayam Course Basic Concepts in Education with respect to their Qualifications.
- There is no significant difference between the Arts and Science participant's scores in the MOOCs' engagement of the participants in the Swayam course Basic Concepts in Education with respect to their Stream.
- There is no significant difference between the Rural and Urban participant's scores in the MOOCs' engagement of the participants in the Swayam Course Basic Concepts in Education with respect to their Residential area.

Methodology

- **Design:** Descriptive
- **Method:** Normative
- **Technique:** Survey

Sample and Sampling Technique

The sample consisted of 528 participants, who enrolled on the Swayam course Basic Concepts in Education from various colleges across the nation. Using a simple Purposive sampling Technique was adopted for the study.

Tools

The tool MOOCs Engagement Scale (MOOCsES) was constructed and validated by C., Vijila, and K., Thiyagu. (2022). The scale consisted of six-teen items on a five-point scale of Always [5], often [4], Neutral [3], Sometimes [2], and Never [1] for positive statements and There are no negative statements

Statistical Techniques Used

The following analysis was applied to the current research.

- Mean, S.D, t-test and F-test

Analysis of the Data

Table 1 Level of MOOCs' Engagement

Level	Frequency	Percent	Valid Percent	Cumulative Percent
Low	97	18.4	18.4	18.4
Moderate	332	62.9	62.9	81.3
High	99	18.8	18.8	100.0
Total	528	100.0	100.0	

From the above table level of MOOCs' Engagement value is 18.4%, 62.9% and 18.8% concerning low, moderate and high. It is noticed that level of MOOCs' Engagement was moderate. Hence, the null hypothesis was rejected.

Figure 1: Level of MOOCs' Engagement

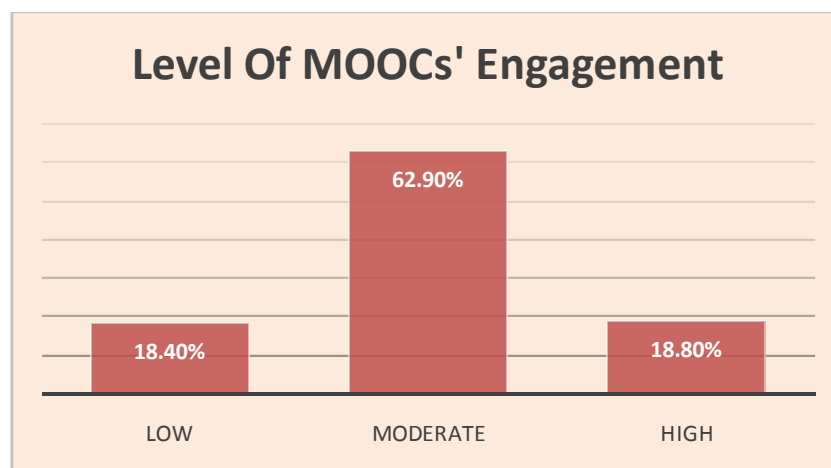


Table 2 t-test scores comparison of the participant scores in the MOOCs' engagement of the participants in the Swayam Course Basic Concepts in Education with respect to their Gender, Marital status, Qualification, Stream and Residential area

Background Variable	N	Mean	SD	df	t	p	Remarks	
Gender	Male	73	67.93	9.65	526	0.81	0.41	NS p > 0.05
	Female	455	68.91	9.64				
Marital Status	Single	306	69.14	9.90	526	1.02	0.30	NS p > 0.05
	Married	222	68.27	9.27				
Qualifications	UG	288	69.05	9.59	526	0.71	0.47	NS p > 0.05
	PG	240	68.45	9.71				
Stream	Arts	242	68.47	10.12	526	0.68	0.49	NS p > 0.05
	Science	286	69.04	9.21				
Residential Area	Rural	366	69.48	9.78	526	2.51	0.01	NS p < 0.05
	Urban	162	67.20	9.13				

From table 2 it is noted that there is a no significant differences in Gender, Marital status, Qualification and Stream mean scores of the MOOCs' engagement Basic Concepts in Education(a)(M=67.93, SD=9.65) and Female (M=68.91, SD=9.64) (b) Single (M=69.14, SD=9.90) and Married (M=68.27, SD=9.27) (c)UG (M=69.06, SD=9.59) and PG (M=68.45, SD=9.71) and (d) (M=68.47, SD=10.12) and Science (M=69.04, SD=9.21) respectively. Furthermore, the 't-test value of MOOCs' Engagement such as gender $t(526)=0.81$, $p=0.41$, marital status $t(526)=1.02$, $p=0.30$, Qualification $t(526)=0.47$, $p=0.30$, stream $t(526)=0.68$, $p=0.49$. Hence the null hypotheses are accepted.

Also, the above table shows that there is a significant difference between Rural (M=69.48, SD=9.78) and Urban (M=67.20, SD=9.13) participants' in terms of MOOCs' Engagement in Swayam Course Basic Concepts in Education scores $t(526)=2.51$, $p=0.01$. Hence the null hypothesis is rejected.

Table 3 F-test scores comparison of the participant scores in the MOOCs' engagement of the participants in the Swayam Course Basic Concepts in Education with respect to their Age and Type of School

Background Variable	N	Mean	SD	df	F	p	Remarks	
Age	21 - 25 years	334	69.15	9.93	525	0.76	0.38	NS p > 0.05
	26 - 30 years	82	67.74	8.61				
	31 and above years	112	68.40	9.46				
Type of Institution	Government	27	68.37	11.81	525	3.21	0.01	NS p < 0.05
	Aided	127	70.25	10.32				
	Self-finance	374	68.31	9.19				

The above table 3 shows that there is no significant difference between 21-25 years ($M=69.15$, $SD=9.93$) and 26 – 30 years ($M=67.74$, $SD=8.61$) and 31 and above years ($M=68.40$, $SD=9.46$) participants in terms of MOOCs' Engagement in Swayam Course Basic Concepts in Education scores $F(5,25)= 0.76$, $p=0.38$. Hence the null hypothesis is accepted.

Also, the above table noted that there is no significant difference between government ($M=68.37$, $SD=11.81$) and Aided ($M=70.25$, $SD=10.32$) and self-finance ($M=68.31$, $SD=9.19$) participants' in terms of MOOCs' Engagement in Swayam Course Basic Concepts in Education scores $F(5,25)= 3.21$, $p=0.01$. Hence the null hypothesis is rejected.

Major Findings

- The level of MOOCs engagement of the participants in the Swayam course Basic Concepts in Education is moderate
- No significant difference between the male and female scores in the MOOCs engagement of the participants in the Swayam course Basic Concepts in Education with respect to gender.
- No significant difference between the single and married participants scores in the MOOCs engagement of the participants in the Swayam Course Basic Concepts in Education with respect to marital status.
- No significant difference among 21-25 years, 26-30 years and 31 and above years participant's scores in the MOOCs engagement in the Swayam course Basic Concepts in Education with respect to age.
- No significant difference between the UG and PG participants in the MOOCs engagement of the participants in the Swayam course Basic Concepts in Education with respect to their Qualifications.
- A significant difference among the Government, Aided and Self-finance institution's participant's in the MOOCs' engagement in the Swayam course Basic Concepts in Education with respect to their Qualifications.
- No significant difference between the Arts and Science participant's scores in the MOOCs' engagement of the participants in the Swayam course Basic Concepts in Education with respect to their Stream.
- A significant difference between the Rural and Urban participant's scores in the MOOCs' engagement of the participants in the Swayam course Basic Concepts in Education with respect to their Residential area.

Discussion and Conclusion

MOOCs have represented a significant shift in online education, first by providing many individuals with free and open access to information, and second by providing a testing laboratory for innovative pedagogical models and new teaching structures. However, MOOCs have been widely criticized in the scientific community for their poor

completion rates, which typically range between 5% and 8%. (A. Antonaci et al., 2017 and A. Vaibhav and P. Gupta, 2014)

The current research results show that MOOCs engagement is moderate and there is a significant difference in the residential area and type of institution. The educational institution may encourage the students to learn the MOOCs courses and also create more awareness of the MOOCs courses among learners worldwide and they may be learning and develop a deep sense of multidisciplinary aspects.

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